

## Pils

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- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **26**
- SRM **3.9**
- Style **German Pilsner (Pils)**

### Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **90 min**
- Evaporation rate **15 %/h**
- Boil size **42.3 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **32 liter(s)**
- Total mash volume **40 liter(s)**

### Steps

- Temp **63 C**, Time **10 min**
- Temp **72 C**, Time **50 min**
- Temp **78 C**, Time **15 min**

### Mash step by step

- Heat up **32 liter(s)** of strike water to **68.4C**
- Add grains
- Keep mash **10 min** at **63C**
- Keep mash **50 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **18.3 liter(s)** of **76C** water or to achieve **42.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	8 kg (100%)	81 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %
Boil	Lublin (Lubelski)	15 g	15 min	4 %
Boil	Lublin (Lubelski)	35 g	5 min	4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Dry	17 g	Fermentis